Master of Public Health Field Experience Report

URINARY RETENTION EDUCATIONAL TOOLKIT: STRATEGIES AND RESOURCES TO REDUCE CATHETER-ASSOCIATED COMPLICATIONS IN LONG-TERM CARE FACILITIES

by

CASSIDY KEIM

MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Graduate Committee:

Dr. Thu Annelise Nguyen

Dr. Abbey Nutsch

Dr. Dana Vanlandingham

Field Experience Site:

Kansas Department of Health and Environment

February 1st, 2016 – March 31st, 2016

Field Experience Preceptor:

Joseph Scaletta, MPH, BSN, RN, CIC

KANSAS STATE UNIVERSITY

Manhattan, Kansas

2016

ABSTRACT

Urinary retention is the inability to completely void the bladder. The condition can either be acute or chronic. Causes of urinary retention include obstruction, infection and inflammation, pharmacological, neurological, or trauma. Urinary retention is common in both sexes, but is especially prevalent in aging men due to enlargement of the prostate which obstructs urine flow. This condition is usually managed by catheterization, specifically indwelling (e.g., Foley catheters) catheters in long-term care facilities. These long-term indwelling catheters increase a person's risk of acquiring an infection. These issues are especially important in long term-care facilities (LTCF), where between 7.5% and 10% of residents have indwelling catheters. Catheter use increases rates of catheter-associated urinary tract infections that can be life threatening in older individuals.

During my field experience at the Kansas Department of Health and Environment (KDHE), I developed a toolkit aimed at addressing the issue of urinary retention among long-term care residents. For this project, I worked closely with my mentors Joseph Scaletta and Brenda Groves. The educational toolkit provides an overview of urinary retention, current assessment and management practices, catheter complications, educational resources for caregivers and family members, and prevalent policies concerning urinary retention.

Subject Keywords: *Urinary retention, toolkit, Long-term care, catheter-associated complications, resident, KDHE, KFMC, bladder scanner, resources, policies*

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

I would first like to thank Joseph Scaletta at the Kansas Department of Health and Environment for his mentorship and guidance throughout my internship. I would also like to thank Brenda Groves at the Kansas Foundation for Medical Care for working patiently with me throughout my internship. The support and encouragement I received from these two people aided in the success of my culminating experience.

I would next like to thank Dr. Annelise Nguyen for her patience and guidance over my last year of the MPH program. Dr. Nguyen was instrumental in helping me complete of my degree. I would also like to thank Dr. Abbey Nutsch and Dr. Dana Vanlandingham for taking time out of their schedules to serve on my committee.

CHAPTER 1: INTRODUCTION

FIELD EXPERIENCE OVERVIEW

My field experience began February 1st, 2016 at the Kansas Department of Health and Environment (KDHE) in Topeka, Kansas. Joseph Scaletta, Director of Healthcare-Associated Infections Program within the Bureau of Epidemiology and Public Health Informatics (BEPHI) at the KDHE managed the project. Brenda Groves, Quality Improvement Project Manager at the Kansas Foundation for Medical Care, Inc. (KFMC), was also a major contributor to the construction of the educational urinary retention toolkit that was developed. Other activities of my field experience listening to the Zika virus national briefing call held by the Centers for Disease Control and Prevention (CDC), being part of a Kansas Quality Improvement Partnership (KQUIP) quarterly meeting, attending the Kansas Hospital Association (KHA) Infection Prevention (IP) annual conference in Wichita, Kansas. The *Clostridium difficile* collaborative is a separate shared project between KDHE and KFMC and I was privileged enough to attend two of these meetings. As stated by my field experience objects, I presented the educational toolkit content at a Kansas Healthcare-Associated Infections Advisory Group meeting on April 8th, 2016. Finally, I was involved in patient notification for an infection prevention breech concerning a flexible endoscope in an ambulatory surgical center.

The KDHE is a state agency serving to improve the health and environment of Kansas. As a part of the KDHE, the Healthcare-Associated Infections (HAIs) Program was created in 2009 and is directed by Joseph Scaletta MPH, BSN, RN, CIC. The program monitors HAIs throughout Kansas as well as provides consultative services on infection prevention. In an effort to improve catheter-associated urinary tract infections (CAUTIs), an educational toolkit was developed to provide information and resources related to the treatment of urinary retention in long-term care facilities (LTCFs).

URINARY RETENTION IN LONG-TERM CARE: OVERVIEW

The process of urine waste removal has many functioning parts. The kidneys first filter blood to produce urine. On average, the kidneys filter between 120-150 quarts of blood per day to produce 1-2 quarts of urine (1). Urine then passes through thin tubes of muscle called ureters. The ureters carry the urine to the bladder which stores the urine until there is an appropriate time or sufficient amount of urine for a person to void. Under normal conditions, the bladder fills with urine at a rate of 30mL/hour (2). Average bladder capacity for an adult is approximately 600 to 1000 ml of urine. When the bladder reaches a critical volume (between 200 ml - 400 ml), the bladder wall is stretched, initiating a signaling pathway that tells the brain the bladder is full and must be voided (2). During voiding, the detrusor muscle of the bladder contracts while the internal and external sphincters relax, allowing urine to pass through the urethra and exit the body. And individual who cannot voluntarily and completely void their bladder suffers from a condition called urinary retention. While somewhat common among both sexes, urinary retention was previously more commonly documented in aging men due to prostate enlargement. Urinary retention is common in the aging population; therefore, it is a prevalent issue in long-term care facilities (LTCFs). Long-term care (LTC) is a comprehensive term referring to several different types of facilities that provide care for individuals who cannot take care of themselves (3). These facilities provide a home for the elderly, disabled, and cognitively impaired. According to the Association for Professionals in Infection Control and Epidemiology (APIC), approximately 1.7 million older adults live in LTCFs annually. Currently there are over 1.5 million people residing in more than 15,000 LTCFs (3). LTC residents may suffer from urinary retention due to any of the following:

- Obstruction of the urethra
- Infectious and inflammatory disease processes
- Pharmacologic

- Neurologic
- Trauma to the urethra or bladder

A detailed explanation of each of these causes can be found in the toolkit content. Urinary retention is most often treated by insertion of an indwelling urinary catheter (e.g. Foley catheters). Catheterization can be external, indwelling (long-term), or intermittent, in which the catheter is inserted several times a day to void the bladder. Each year in the United States, nearly 4 million people undergo catheterization and more than 500,000 of these catheters remain indwelling (4). In long-term care facilities (LTCFs), it is estimated that between 7.5% and 10% of residents have indwelling catheters (4). While the indications for catheter use have been well documented in the literature, catheters are still being used inappropriately and unnecessarily in many cases. For example, catheters are often inserted without proper documentation for removal; therefore, these catheters remain in place for an extend period of time leading to increased infection rates. Catheter duration use is directly associated with increased risk of developing a catheter-associated complication. While catheterization is an effective means of treating urinary retention, there are many associated complications including increased risk of catheter-associated urinary tract infections (CAUTIs), trauma to the urethra and bladder, catheter blockage, impaired mobility, and psycho-social impacts on an individual's quality of life. There are several alternative management options that can lessen the impact on a resident's health and quality of life. According to Nicolle, "CAUTIs are the most common adverse event associated with indwelling urinary catheters." Approximately 70-80% of healthcare acquired infections are attributable to use of indwelling catheters (5). Catheterization results in over 1 million CAUTIs each year in LTCFs (6). Each episode of CAUTI is estimated to cost at least $600 and subsequent urinary tract-related bacteremia costs at least $2,800 (7). CAUTIs have substantial economic and public health impact. Most importantly, these infections are largely preventable if proper management practices are implemented.

The best way to reduce CAUTI rates in LTCFs is to avoid unnecessary use of indwelling catheters. By reducing the use of indwelling catheters, LTCFs may reduce costs associated with catheter-associated complications and improve resident health. Chapter two will discuss advantages and disadvantages for each urinary retention management practice.

CHAPTER 2: MANAGEMENT PRACTICES AND CHALLENGES

This chapter will discuss management practices with respect to complications and benefits. Each management option will be discussed in detail, including a summary table of the advantages and disadvantages of each management option.

MANAGEMENT PRACTICES: INDWELLING CATHETERS

Indwelling catheters are long-term catheters used as a voiding tool in 7.5-10% of long-term care residents (4). This type of catheter is most often used in LTC residents due to the convenience of this management option. However, indwelling catheters are inserted and left in place allowing the resident to void the bladder without assistance by a LTCF staff member. Indwelling catheters can cause severe complications in LTC residents. CAUTIs are the most common adverse event associated with chronic indwelling catheters. According to Nicolle, "the daily risk of acquisition of bacteriuria when an indwelling catheter remains inserted is 3.7%." Therefore, every resident with a catheter in place for 30 or more days should be considered bacteriuric (6).

MANAGEMENT PRACTICES: INTERMITTENT CATHETERS

Intermittent catheterization is the insertion and removal of a catheter several times a day to empty the bladder. While catheterization of any sort should be a last resort, intermittent catheterization is the preferred method of catheterization because there is less risk of catheter-associated complications, specifically CAUTIs. Advantages of intermittent catheters over indwelling catheters include improved self-care and independence, reduced risk of catheter-associated complications, and improved quality of life compared to indwelling urethral catheters. Inserting an

intermittent catheter four to six times a day is the preferred method of bladder management but can still cause catheter-related complications. Frequent insertion of a catheter can lead to urethritis (inflammation of the urethra), urethral bleeding, and creation of a false passage which commonly occurs in men with urethral strictures or who have an enlarged prostate. Epididymitis is a common complication in men with spinal cord injuries who self-catheterize. All of these complications could potentially cause pain to the resident and alter their quality of life (8).

ALTERNATIVE MANAGEMENT PRACTICES

Alternative management options are available. These options are bladder scanner and intermittent catheterization, scheduled toileting and bladder retraining, and bladder massages. These options decrease the risk of the resident acquiring a CAUTI or other catheter complication and should be considered by each facility as the most appropriate management practice for the urinary retention. Bladder scanners and intermittent catheterization, scheduled toileting and bladder retraining, and bladder massages all lessen the risk of infection, improve resident's self-image, and have a positive impact on a resident's quality of life. These management options can be difficult for some facilities to implement and adhere to for numerous reasons. LTCFs often lack resources, both financial and personnel, to implement the alternative management options. Benefits and challenges of each alternative management option will be discussed. Bladder and bowel assessment forms from the Centers of Medicaid and Medicare Services Resident Assessment manual can be found in the appendix. These forms include bladder and bowel assessment forms and toileting program forms.

BLADDER SCANNER AND INTERMITTENT CATHETERIZATION

Post voidal residual (PVR) urine is usually assessed by inserting an intermittent catheter immediately after a voiding attempt to measure the amount of urine remaining in the bladder following

a voiding attempt. Evidence-based research considers catheterization to be the 'gold standard' for PVR urine assessment and detection of urinary retention; however, catheterization can lead to infection and injury as previously stated. Alternatively, a bladder scanner can be used to measure PVR urine and, therefore, intermittent catheterization would only be performed if the bladder volume is critical. A bladder scanner is a non-invasive technique that can greatly improve resident well-being when managing urinary retention. Bladder scanners can decrease costs associated with catheters by decreasing the prevalence of CAUTIs in a facility. A study done by Wilson and colleagues found that after implementing a bladder scanner program, they were able to avoid 1392 catheterizations during the first year. Cost saving included $2,784 in catheter supplies and $45,900 cost savings related to prevented CAUTIs and associated catheter complications (9). Similar findings were identified in a cost benefit analysis done by Stevens. The analysis estimated the BVI 2500 bladder scanner initial purchase price to be $8,300. The cost of each CAUTI was estimated to be $680 per incident. Therefore, 2,280 avoided catheterization due to the ultrasound technology of the bladders scanner, researchers determined that the device would pay for itself in just 2.9 years (10). Initial costs of bladder scanners may be burdensome to facilities that lack financial resources; however, long-term benefits can off-set the initial costs.

SCHEDULED TOILETING AND BLADDER RETRAINING

Scheduled voiding is a behavior technique that calls for scheduled toileting at regular intervals. A toileting program or plan refers to a specific approach that is organized, planned, documented, monitored, and evaluated and is consistent with the LTCFs policies and procedures and current standards of practice (11). A toileting program is developed following a three-day toileting trial. During the toileting trial, voiding patterns are recorded in a voiding diary. The voiding diary should be reviewed after three days to assess for voiding patterns such as frequency of urination, volume, duration, or

nocturia (11). Results of the toileting trial should be used to develop the individualized toileting plan for the resident. Timed or scheduled toileting prevents the bladder from becoming too full and, therefore, helps to prevent weakening of the detrusor bladder muscle (11). Voiding on a routine schedule, usually every two to three hours, allows the bladder to fill without becoming too distended. Bladder retraining or rehabilitation is a behavioral technique that requires the resident to resist or inhibit the sensation to urinate, to postpone or delay voiding, and to urinate according to a timetable rather than to the urge to void (11). Bladder retraining seeks to reduce voiding frequency and restore overall normal bladder function and can promote complete bladder contraction and emptying (12). Bladder retraining can be especially important in long-term care facilities (2). Development of a toileting schedule requires adequate personnel. Facility workers must work with residents on an individualized basis to develop the toileting plan and be available to implement the plan and aid residents in their voiding attempts. Many LTCFs see high turnover rates in their staff. Frequent hiring of new staff members can be detrimental to a toileting plan due to the caregiver's unfamiliarity with the residents voiding needs.

MANAGEMENT PRACTICES SUMMARY TABLE

Table 2.1 compares each of the urinary retention management options previously described. The table provides a comparison of the advantages and disadvantages of each management options.

Table 2.1: Urinary Retention Management Practices Comparison

Management Type	**Advantages**	**Disadvantages**
Indwelling catheterization	-Can be used to empty bladder when resident is bed-bound -Short-term for skin wounds or pressure ulcers when other measures are not viable and healing is enhanced by keeping the area dry -Urinary retention that cannot be managed with intermittent catheterization	Catheter-associated complications such as: -Infection *CAUTI *Bacteriuria *Urosepsis -Urethral damage *Urethritis *Urethral strictures -Hematuria -Urine leakage around catheter -Trauma
Intermittent catheterization	-Improved self-care and independence -Reduced risk of catheter-associated complications -Improves self-image and quality of life	Catheter-associated complications such as: -Infection *CAUTI *Bacteriuria -Urethral damage *Urethritis *Urethral stricture *Creation of a false passage *Urethral trauma due to unskillful insertion or removal of catheter -Epididymitis -Bladder stones
Bladder scanner & Intermittent catheterization	-Bladder scanners can measure PVR volume non-invasively with a high degree of accuracy -Allows for early removal of indwelling catheters -Knowledge about bladder volume may eliminate unnecessary voiding attempts -Reduces risk of infections caused by	LTCF may not have the financial resources to purchase the equipment Some have shown to give higher PVR readings than in-and-out catheterization The following factors may alter readings: o Obesity o Inadequate ultra sound gel

	catheters -Intermittent catheterization performed only when bladder capacity is critical	○ Improper use ○ Scar tissue
Scheduled toileting plan & bladder retraining	-Allows resident to void at regular intervals -Toileting plans are individualized to meet residents voiding needs -No risk of developing a catheter-associated complication	-Requires time and adequate personnel -Residents must maintain a voiding diary

CHAPTER 3: ESTABLISHMENT OF TOOLKIT

Urinary retention management practices pose significant health issues in LTC residents. These health issues become more prevalent in LTC residents due to altered immune status, living conditions, and other complications. The goal of the KDHE to improve public health; therefore, an educational toolkit focusing on urinary retention management options and related complications was developed. The toolkit was developed as a collaborative effort between KDHE and KFMC. Learning objectives for the toolkit include:

- Define the term urinary retention
- Identify causes of urinary retention
- Identify how urinary retention is managed in LTCF residents
- Describe why the current management option is a prevalent public health issue
- Describe alternative practices for managing urinary retention in LTCF residents

This educational toolkit aims to describe the current implications and complications for treatment of urinary retention using intermittent or indwelling catheters as well as provide alternative management options to reduce the public health and economic impact of CAUTIs and other catheter complications. The toolkit contains numerous literature reviews providing readers with adequate background knowledge on the condition of urinary retention. Toolkit content includes information on changing bladder physiology with age, epidemiology of urinary retention, causes of urinary retention, the assessment process for urinary retention, management practices, and complication of management practices. The toolkit also contains resources such sample polices and forms for urethral catheters. Situation, Background, Assessment, and Recommendation (SBAR) forms were included in the toolkit.

SBAR is a technique used to facilitate communication and promote resident safety by opening communication channels between physicians and LTCF staff. SBAR forms are used to share resident information in a clear and complete format. Sample forms can be found in the appendix.

The educational toolkit also contains a CD-ROM with multiple PowerPoints. Three of the PowerPoints break down the toolkit into three parts: overview of urinary retention, assessing for urinary retention, and urinary retention management practices. These three presentations can be used by each facility to educate their staff on the issue of urinary retention by explaining how to assess for the condition and how to safely manage the condition. A fourth PowerPoint gives a broad overview of urinary retention and is meant to educate residents who suffer from urinary retention about the condition. The fifth PowerPoint describes the process of filling out medical data sheets. Using a PowerPoint template provided by KFMC, I developed an interactive game similar to the game show "Jeopardy." The purpose of this PowerPoint is to provide an interactive learning experience for caregivers working in LTC. The PowerPoint consists of 25 questions; five questions in five different categories, relating to urinary retention. For the purposes of this paper, a pdf version of the presentation can be found in the appendix. The goal of the toolkit is to provide healthcare professionals, caregivers, and LTC residents with information on the specifics of urinary retention and its management as well as to provide resources and strategies to reduce catheter-associated complications. Upon completion, the toolkit will be distributed to over 300 LTCF in Kansas as an educational resource.

I presented the content of this educational toolkit to the Kansas Healthcare-Associated Infections Advisory Group on April 8th, 2016. The presentation provided a brief overview of the condition, how it is treated, and the problem with current treatments. Together, members of the

advisory group presented ideas for further distribution of the toolkit and methods for measuring effectiveness.

CHAPTER 4: CONCLUSION

My time in the Kansas State University Master's of Public Health program has provided me with the knowledge necessary to develop the toolkit. Focusing on infectious disease and zoonosis provided me with the knowledge of infectious agents such as bacteria, viruses and parasites that can cause infectious disease. Urinary tract infections are most often caused by *Escherichia coli* and *Proteus mirabilis* species. *Proteus mirabilis* is a urease producer; therefore, when it is found in the urinary tract it can breakdown urea into a crystalline structure. This crystalline formation can lead to catheter blockage causing the symptoms of urinary retention to worsen. Catheter blockage can cause the urine to reflux back into the bladder, or even further into the kidneys causing damage and scarring to the kidneys. As people age, their immune system is weakened and body physiology changes. Immunocompromised individuals are at a higher risk of developing comorbidities in health care settings due to their altered immune status and changing physiology. Residents living in LTCFs are in close contact with other residents, caregivers, and visitors of the facility. These close-quarter living situations lead to an increase in transmission of infectious organisms.

Urinary retention is a major public health issue because it is most often managed using catheterization. In LTCFs, indwelling urinary catheters are the most common management practice. These catheters, if left in place for an extended period of time, can lead to major complications such as CAUTIs. Chronic indwelling catheters are often colonized by biofilm which can lead to polymicrobial infections and catheter blockage due to biofilm formation inside the catheter. The educational toolkit was developed to communicate the issue of urinary retention to healthcare professionals and caregivers. Educational resources were developed to communicate the importance of proper catheter

management practices. Resources for alternative management options were communicated in hopes that the prevalence of catheters in LTCFs will decrease, ultimately reducing the rates of catheter-associated infections and complications. Future plans involve determining a way to measure the effectiveness of the educational toolkit after distribution to LTCFs.

NEXT STEPS

The official toolkit is in currently undergoing review by Lou Saadi, PhD, Deputy Director and State Registrar Bureau of Epidemiology and Public Health Informatics, Kansas Department of Health and Environment, and Nadyne Hagmeier, RN, Quality Improvement Project Manager at the Kansas Foundation for Medical Care. Once the review process is completed, the toolkit will be printed and distributed to all long-term care facilities in the state of Kansas. Further thought is needed to identify a way to measure the effectiveness of this educational toolkit after distribution. The KDHE plans to distribute the educational toolkit to all LTCFs in Kansas. Randomly selecting a subset of those facilities as a test group to measure the efficacy of this educational resource could be done. Identifying effective ways to market this educational toolkit may also be beneficial in determining strength of this product. Marketing, distribution, and measuring effectiveness are the final steps of this educational resource.

BIBLIOGRAPHY

1 - Urinary Retention. (2014, August). *National Institute of Diabetes and Digestive and Kidney Disease*. Retrieved February 24, 2016, from http://www.niddk.nih.gov/health-information/health-topics/urologic-disease/urinary-retention/Pages/facts.aspx

2 - Potter, Patricia A., et al. *Fundamentals of nursing*. Elsevier Health Sciences, 2013.

3 - Burdsall, Deborah Patterson, Marilyn Hanchett, Dolly Greene, Steven J. Schweon, James F. Marx, Patricia Rosenbaum, and Irena Kenneley. "Understanding Infection Prevention in Long-Term Care." *Infection Preventionist's Guide to Long-term Care*. 1st ed. Washington, DC: APIC, 2013. 1-12. Print.

4 - Herter, Rebecca, and Meredith Wallace Kazer. "Best practices in urinary catheter care." *Home Healthcare Now* 28.6 (2010): 342-349.

5 - Nicolle, Lindsay E. "Catheter associated urinary tract infections." *Antimicrobial resistance and infection control* 3.1 (2014): 1.

6 - Nicolle, Lindsay E. "The Chronic Indwelling Catheter and Urinary Infection in Long-Term–Care Facility Residents." *Infection Control and Hospital Epidemiology* 22.5 (2001): 316-21. Web.

7 - Saint, Sanjay et al. "Catheter-Associated Urinary Tract Infection and the Medicare Rule Changes." *Annals of internal medicine* 150.12 (2009): 877–884. Print.

8 - Newman, Diane K., and Margaret M. Willson. "Review of intermittent catheterization and current best practices." *Urologic nursing* 31.1 (2011): 12.

9 - Wilson, Amy, MS, RT(R), RDMS, RVTv, Renee Dugger, DNP, RN, GCNS-BC, Katie Ehlman, PhD, CHES, HFA, and Brandon Eggleston, PhD, CHES, RYT. "Implementation Science in Nursing Homes: A Case Study of the Integration of Bladder Ultrasound Scanners." *Annals of Long Term Care*. N.p., 15 June 2015. Web. 19 Apr. 2016. <http://www.annalsoflongtermcare.com/article/implementation-science-nursing-homes-case-study-integration-bladder-ultrasound-scanners>.

10 - Stevens, Elizabeth. "Bladder ultrasound: avoiding unnecessary catheterizations." *Medsurg Nursing* 14.4 (2005): 249.

11 – "RAI Manual." *RAI Manual*. Centers for Medicare & Medicaid Services, n.d. Web. 21 Apr. 2016. <http://www.aanac.org/Information-Resources/RAI-Manual>.

12 - Testa, Angela. "Understanding urinary incontinence in adults." *Urologic nursing* 35.2 (2015): 82-87.

SECTION H: BLADDER AND BOWEL

Intent: The intent of the items in this section is to gather information on the use of bowel and bladder appliances, the use of and response to urinary toileting programs, urinary and bowel continence, bowel training programs, and bowel patterns. Each resident who is incontinent or at risk of developing incontinence should be identified, assessed, and provided with individualized treatment (medications, non-medicinal treatments and/or devices) and services to achieve or maintain as normal elimination function as possible.

H0100: Appliances

H0100. Appliances	
↓ Check all that apply	
☐	A. **Indwelling catheter** (including suprapubic catheter and nephrostomy tube)
☐	B. **External catheter**
☐	C. **Ostomy** (including urostomy, ileostomy, and colostomy)
☐	D. **Intermittent catheterization**
☐	Z. **None of the above**

Item Rationale

Health-related Quality of Life

- It is important to know what appliances are in use and the history and rationale for such use.
- External catheters should fit well and be comfortable, minimize leakage, maintain skin integrity, and promote resident dignity.
- Indwelling catheters should not be used unless there is valid medical justification. Assessment should include consideration of the risk and benefits of an indwelling catheter, the anticipated duration of use, and consideration of complications resulting from the use of an indwelling catheter. Complications can include an increased risk of urinary tract infection, blockage of the catheter with associated bypassing of urine, expulsion of the catheter, pain, discomfort, and bleeding.
- Ostomies (and periostomal skin) should be free of redness, tenderness, excoriation, and breakdown. Appliances should fit well, be comfortable, and promote resident dignity.

Planning for Care

- Care planning should include interventions that are consistent with the resident's goals and minimize complications associated with appliance use.

DEFINITIONS

INDWELLING CATHETER
A catheter that is maintained within the bladder for the purpose of continuous drainage of urine.

SUPRAPUBIC CATHETER
An indwelling catheter that is placed by a urologist directly into the bladder through the abdomen. This type of catheter is frequently used when there is an obstruction of urine flow through the urethra.

NEPHROSTOMY TUBE
A catheter inserted through the skin into the kidney in individuals with an abnormality of the ureter (the fibromuscular tube that carries urine from the kidney to the bladder) or the bladder.

H0100: Appliances (cont.)

- Care planning should be based on an assessment and evaluation of the resident's history, physical examination, physician orders, progress notes, nurses' notes and flow sheets, pharmacy and lab reports, voiding history, resident's overall condition, risk factors and information about the resident's continence status, catheter status, environmental factors related to continence programs, and the resident's response to catheter/continence services.

Steps for Assessment

1. Examine the resident to note the presence of any urinary or bowel appliances.
2. Review the medical record, including bladder and bowel records, for documentation of current or past use of urinary or bowel appliances.

Coding Instructions

*Check next to each appliance that was used at any time in the past 7 days. Select **none of the above** if none of the appliances A-D were used in the past 7 days.*

- **H0100A,** indwelling catheter (including suprapubic catheter and nephrostomy tube)
- **H0100B,** external catheter
- **H0100C,** ostomy (including urostomy, ileostomy, and colostomy)
- **H0100D,** intermittent catheterization
- **H0100Z,** none of the above

Coding Tips and Special Populations

- Suprapubic catheters and nephrostomy tubes should be coded as an indwelling catheter (H0100A) only and not as an ostomy (H0100C).
- Condom catheters (males) and external urinary pouches (females) are often used intermittently or at night only; these should be coded as external catheters.
- Do not code gastrostomies or other feeding ostomies in this section. Only appliances used for elimination are coded here.
- Do not include one time catheterization for urine specimen during look back period as intermittent catheterization.

DEFINITIONS

EXTERNAL CATHETER
Device attached to the shaft of the penis like a condom for males or a receptacle pouch that fits around the labia majora for females and connected to a drainage bag.

OSTOMY
Any type of surgically created opening of the gastrointestinal or genitourinary tract for discharge of body waste.

UROSTOMY
A stoma for the urinary system used in cases where long-term drainage of urine through the bladder and urethra is not possible, e.g., after extensive surgery or in case of obstruction.

ILEOSTOMY
A stoma that has been constructed by bringing the end or loop of small intestine (the ileum) out onto the surface of the skin.

COLOSTOMY
A stoma that has been constructed by connecting a part of the colon onto the anterior abdominal wall.

INTERMITTENT CATHETERIZATION
Sterile insertion and removal of a catheter through the urethra for bladder drainage.

H0200: Urinary Toileting Program

H0200. Urinary Toileting Program	
Enter Code ☐	**A. Has a trial of a toileting program (e.g., scheduled toileting, prompted voiding, or bladder training)** been attempted on admission/entry or reentry or since urinary incontinence was noted in this facility? 0. **No** → Skip to H0300, Urinary Continence 1. **Yes** → Continue to H0200B, Response 9. **Unable to determine** → Skip to H0200C, Current toileting program or trial
Enter Code ☐	**B. Response** - What was the resident's response to the trial program? 0. **No improvement** 1. **Decreased wetness** 2. **Completely dry** (continent) 9. **Unable to determine** or trial in progress
Enter Code ☐	**C. Current toileting program or trial** - Is a toileting program (e.g., scheduled toileting, prompted voiding, or bladder training) currently being used to manage the resident's urinary continence? 0. **No** 1. **Yes**

Item Rationale

Health-related Quality of Life

- An individualized, resident-centered toileting program may decrease or prevent urinary incontinence, minimizing or avoiding the negative consequences of incontinence.
- Determining the type of urinary incontinence can allow staff to provide more individualized programming or interventions to enhance the resident's quality of life and functional status.
- Many incontinent residents (including those with dementia) respond to a toileting program, especially during the day.

Planning for Care

- The steps toward ensuring that the resident receives appropriate treatment and services to restore as much bladder function as possible are
  - — determining if the resident is currently experiencing some level of incontinence or is at risk of developing urinary incontinence;
  - — completing an accurate, thorough assessment of factors that may predispose the resident to having urinary incontinence; and
  - — implementing appropriate, individualized interventions and modifying them as appropriate.
- If the toileting program or bladder retraining leads to a decrease or resolution of incontinence, the program should be maintained.
- Research has shown that one quarter to one third of residents will have a decrease or resolution of incontinence in response to a toileting program.
- If incontinence is not decreased or resolved with a toileting trial, consider whether other reversible or treatable causes are present.
- Residents may need to be referred to practitioners who specialize in diagnosing and treating conditions that affect bladder function.
- Residents who do not respond to a toileting trial and for whom other reversible or treatable causes are not found should receive supportive management (such as checking the resident for incontinence and changing his or her brief if needed and providing good skin care).

H0200: Urinary Toileting Program (cont.)

Steps for Assessment: H0200A, Trial of a Toileting Program

The look-back period for this item is since the most recent admission/entry or reentry or since urinary incontinence was first noted within the facility.

1. Review the medical record for evidence of a trial of an individualized, resident-centered toileting program. A toileting trial should include observations of at least 3 days of toileting patterns with prompting to toilet and of recording results in a bladder record or voiding diary. Toileting programs may have different names, e.g., habit training/scheduled voiding, bladder rehabilitation/bladder retraining.
2. Review records of voiding patterns (such as frequency, volume, duration, nighttime or daytime, quality of stream) over several days for those who are experiencing incontinence.
3. Voiding records help detect urinary patterns or intervals between incontinence episodes and facilitate providing care to avoid or reduce the frequency of episodes.
4. Simply tracking continence status using a bladder record or voiding diary should not be considered a trial of an individualized, resident-centered toileting program.
5. Residents should be reevaluated whenever there is a change in cognition, physical ability, or urinary tract function. Nursing home staff must use clinical judgment to determine when it is appropriate to reevaluate a resident's ability to participate in a toileting trial or, if the toileting trial was unsuccessful, the need for a trial of a different toileting program.

Steps for Assessment: H0200B, Response to Trial Toileting Program

1. Review the resident's responses as recorded during the toileting trial, noting any change in the number of incontinence episodes or degree of wetness the resident experiences.

DEFINITIONS

BLADDER REHABILITATION/ BLADDER RETRAINING
A behavioral technique that requires the resident to resist or inhibit the sensation of urgency (the strong desire to urinate), to postpone or delay voiding, and to urinate according to a timetable rather than to the urge to void.

PROMPTED VOIDING
Prompted voiding includes (1) regular monitoring with encouragement to report continence status, (2) using a schedule and prompting the resident to toilet, and (3) praise and positive feedback when the resident is continent and attempts to toilet.

HABIT TRAINING/ SCHEDULED VOIDING
A behavior technique that calls for scheduled toileting at regular intervals on a planned basis to match the resident's voiding habits or needs.

CHECK AND CHANGE
Involves checking the resident's dry/wet status at regular intervals and using incontinence devices and products.

H0200: Urinary Toileting Program (cont.)

Steps for Assessment: H0200C, Current Toileting Program or Trial

1. Review the medical record for evidence of a toileting program being used to manage incontinence during the 7-day look-back period. Note the number of days during the look-back period that the toileting program was implemented or carried out.
2. Look for documentation in the medical record showing that the following three requirements have been met:
   - implementation of an individualized, resident-specific toileting program that was based on an assessment of the resident's unique voiding pattern;
   - evidence that the individualized program was communicated to staff and the resident (as appropriate) verbally and through a care plan, flow records, and a written report; and
   - notations of the resident's response to the toileting program and subsequent evaluations, as needed.
3. Guidance for developing a toileting program may be obtained from sources found in Appendix C.

Coding Instructions H0200A, Toileting Program Trial

- **Code 0, no:** if for any reason the resident did not undergo a toileting trial. This includes residents who are continent of urine with or without toileting assistance, or who use a permanent catheter or ostomy, as well as residents who prefer not to participate in a trial. Skip to **Urinary Continence** item (H0300).
- **Code 1, yes:** for residents who underwent a trial of an individualized, resident-centered toileting program at least once since the most recent admission/entry or reentry or since urinary incontinence was first noted within the facility.
- **Code 9, unable to determine:** if records cannot be obtained to determine if a trial toileting program has been attempted. If code 9, skip H0200B and go to H0200C, **Current Toileting Program or Trial**.

Coding Instructions H0200B, Toileting Program Trial Response

- **Code 0, no improvement:** if the frequency of resident's urinary incontinence did not decrease during the toileting trial.
- **Code 1, decreased wetness:** if the resident's urinary incontinence frequency decreased, but the resident remained incontinent. There is no quantitative definition of improvement. However, the improvement should be clinically meaningful—for example, having at least one less incontinent void per day than before the toileting program was implemented.
- **Code 2, completely dry (continent):** if the resident becomes completely continent of urine, with no episodes of urinary incontinence during the toileting trial. (For residents who have undergone more than one toileting program trial during their stay, use the most recent trial to complete this item.)
- **Code 9, unable to determine or trial in progress:** if the response to the toileting trial cannot be determined because information cannot be found or because the trial is still in progress.

H0200: Urinary Toileting Program (cont.)

Coding Instructions H0200C, Current Toileting Program

- **Code 0, no:** if an individualized resident-centered toileting program (i.e., prompted voiding, scheduled toileting, or bladder training) is used less than 4 days of the 7-day look-back period to manage the resident's urinary continence.
- **Code 1, yes:** for residents who are being managed, during 4 or more days of the 7-day look-back period, with some type of systematic toileting program (i.e., bladder rehabilitation/bladder retraining, prompted voiding, habit training/scheduled voiding). Some residents prefer to not be awakened to toilet. If that resident, however, is on a toileting program during the day, code "yes."

Coding Tips for H0200A-C

- Toileting (or trial toileting) programs refer to a specific approach that is organized, planned, documented, monitored, and evaluated that is consistent with the nursing home's policies and procedures and current standards of practice. A toileting program does not refer to
  - simply tracking continence status,
  - changing pads or wet garments, and
  - random assistance with toileting or hygiene.
- For a resident currently undergoing a trial of a toileting program,
  - H0200A would be **coded 1, yes,**
  - H0200B would be **coded 9, unable to determine or trial in progress**, and
  - H0200C would be **coded 1, yes.**

Example

1. Mrs. H. has a diagnosis of advanced Alzheimer's disease. She is dependent on the staff for her ADLs, does not have the cognitive ability to void in the toilet or other appropriate receptacle, and is totally incontinent. Her voiding assessment/diary indicates no pattern to her incontinence. Her care plan states that due to her total incontinence, staff should follow the facility standard policy for incontinence, which is to check and change every 2 hours while awake and apply a superabsorbent brief at bedtime so as not to disturb her sleep.

   Coding: H0200A would be **coded as 0, no**. H0200B and H0200C would be skipped.

   Rationale: Based on this resident's voiding assessment/diary, there was no pattern to her incontinence. Therefore, H0200A would be coded as 0, no. Due to total incontinence a toileting program is not appropriate for this resident. Since H0200A is coded 0, no, skip to H0300, Urinary Continence.

H0200: Urinary Toileting Program (cont.)

2. Mr. M., who has a diagnosis of congestive heart failure (CHF) and a history of left-sided hemiplegia from a previous stroke, has had an increase in urinary incontinence. The team has assessed him for a reversible cause of the incontinence and has evaluated his voiding pattern using a voiding assessment/diary. After completing the assessment, it was determined that incontinence episodes could be reduced. A plan was developed and implemented that called for toileting every hour for 4 hours after receiving his 8 a.m. diuretic, then every 3 hours until bedtime at 9 p.m. The team has communicated this approach to the resident and the care team and has placed these interventions in the care plan. The team will reevaluate the resident's response to the plan after 1 month and adjust as needed.

   Coding: H0200A would be **coded as 1, yes.**

   H0200B would be **coded as 9, unable to determine or trial in progress**

   H0200C would be **coded as 1, current toileting program or trial.**

   Rationale: Based on this resident's voiding assessment/diary, it was determined that this resident could benefit from a toileting program. Therefore H0200A is coded as 1, yes. Based on the assessment it was determined that incontinence episodes could be reduced, therefore H0200B is coded as 9, unable to determine or trial in progress. An individualized plan has been developed, implemented, and communicated to the resident and staff, therefore H0200C is coded as 1, current toileting program or trial.

H0300: Urinary Continence

H0300. Urinary Continence	
Enter Code ☐	**Urinary continence** - Select the one category that best describes the resident 0. **Always continent** 1. **Occasionally incontinent** (less than 7 episodes of incontinence) 2. **Frequently incontinent** (7 or more episodes of urinary incontinence, but at least one episode of continent voiding) 3. **Always incontinent** (no episodes of continent voiding) 9. **Not rated,** resident had a catheter (indwelling, condom), urinary ostomy, or no urine output for the entire 7 days

Item Rationale

Health-related Quality of Life

- Incontinence can
  - — interfere with participation in activities,
  - — be socially embarrassing and lead to increased feelings of dependency,
  - — increase risk of long-term institutionalization,
  - — increase risk of skin rashes and breakdown,
  - — increase risk of repeated urinary tract infections, and
  - — increase the risk of falls and injuries resulting from attempts to reach a toilet unassisted.

DEFINITIONS

URINARY INCONTINENCE
The involuntary loss of urine.

CONTINENCE
Any void that occurs voluntarily, or as the result of prompted toileting, assisted toileting, or scheduled toileting.

SBAR Communication Form
and Progress Note

INTERACT®
Version 3.0 Tool

Before Calling MD / NP / PA:

☐ **Evaluate the Resident:** Complete relevant aspects of the SBAR form below
☐ **Check Vital Signs:** BP, pulse, and/or apical heart rate, temperature, respiratory rate, oximetry, and finger stick glucose, if indicated
☐ **Review Record:** Recent progress notes, labs, orders
☐ **Review an INTERACT Care Path** or **Acute Change in Condition File Card**, if indicated
☐ **Have Relevant Information Available when Reporting**
(i.e. medical record, vital signs, advance directives such as DNR and other care limiting orders, allergies, medication list)

SITUATION

The change in condition, symptoms, or signs I am calling about is/are _____

This started on _____ /_____ /_____ Since this started has it gotten: ☐ Worse ☐ Better ☐ Stayed the same

Things that make the condition or symptom ***worse*** are _____

Things that make the condition or symptom ***better*** are _____

This condition, symptom, or sign has occurred before: ☐ Yes ☐ No

Treatment for last episode *(if applicable)* _____

Other relevant information _____

BACKGROUND

Resident Description
This resident is in the NH for: ☐ Post-Acute Care ☐ Long-Term Care

Primary diagnoses _____

Other pertinent history *(e.g. medical diagnosis of CHF, DM, COPD)* _____

Medication Alerts
☐ Changes in the last week *(describe below)* ☐ Resident is on warfarin/coumadin: Result of last INR _____ Date _____/_____/_____

Allergies _____

Vital Signs

BP _____ Pulse _____ Apical HR _____ RR _____ Temp _____ Weight _____ lbs *(date _____/_____/_____)*

For CHF, edema, or weight loss: last weight before the current one was _____ on _____/_____/_____

Oximetry % _____ ☐ on room air ☐ on O2 *(liters/minute)* _____

Residents Name _____

(continued)

SBAR Communication Form
and Progress Note (cont'd)

INTERACT®
Version 3.0 Tool

For the next 5 items, complete only those relevant to the change in condition.
If the item is not relevant, check 'N/A' for not applicable.

1. Mental Status Changes *(compared to baseline; check all that you observe)* ☐ N/A
☐ Increased confusion ☐ New or worsening behavioral symptoms
☐ Decreased consciousness *(sleepy, lethargic)* ☐ Unresponsiveness
☐ Other symptoms or signs of delirium *(e.g. inability to pay attention, disorganized thinking)*

Describe symptoms or signs _____

2. Functional Status Changes *(compared to baseline; check all that you observe)* ☐ N/A
☐ Needs more assistance with ADLs ☐ Decreased mobility ☐ Fall ☐ Other *(describe)*
☐ Weakness or hemiparesis ☐ Slurred speech ☐ Trouble swallowing

Describe symptoms or signs _____

3. Respiratory ☐ N/A
☐ Shortness of breath ☐ Cough (☐ Non-productive ☐ Productive)
☐ Abnormal lung sounds ☐ Labored breathing

Describe symptoms or signs _____

4. GI/Abdomen ☐ N/A
☐ Nausea ☐ Vomiting ☐ Diarrhea ☐ Decreased appetite ☐ Abdominal pain
☐ Distended abdomen ☐ Tenderness ☐ Decreased bowel sounds *(date of last BM* _____ /_____/_____ *)*

Describe symptoms or signs _____

5. GU/Urine Changes *(compared to baseline; check all that you observe)* ☐ N/A
☐ Decreased urine output ☐ Painful urination ☐ Urinating more frequently
☐ Needs to urinate more urgently ☐ Blood in urine ☐ New or worsening incontinence

Describe symptoms or signs _____

Recent Lab Results *(e.g. CBC, chemistry or metabolic panel, drug levels)*

_____

_____

Advance Care Planning Information *(the resident has orders for the following advance directives)*
☐ DNR ☐ DNI *(Do Not Intubate)* ☐ DNH *(Do Not Hospitalize)* ☐ No Enteral Feeding ☐ Other Order or Living Will *(specify)*

_____

Other resident or family preferences for care _____

Residents Name _____

(continued)

SBAR Communication Form
and Progress Note (cont'd)

INTERACT®
Version 3.0 Tool

ASSESSMENT (RN) OR APPEARANCE (LPN)

What do you think is going on with the resident?
For RNs: I think the problem may be *(e.g. cardiac, infection, respiratory, dehydration)* _____

_____

For LPNs: The resident appears *(e.g. short of breath, in pain, more confused)* _____

_____

REQUEST

I suggest or request *(check all that apply)*

☐ Monitor vital signs ☐ Lab work ☐ X-ray ☐ EKG ☐ Provider visit *(MD/NP/PA)*
☐ Transfer to the hospital *(send a copy of this form)* ☐ Other new orders *(specify)*

Nursing Notes *(for additional information on the Change in Condition)*

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name of Family/Health Care Agent Notified: _____ **Date** ____/____/____ **Time (am/pm)**_____

Reported to Primary Care Clinician (MD/NP/PA): _____ **Date** ____/____/____ **Time (am/pm)**_____

Staff Name (RN/LPN) and Signature _____

Residents Name _____

Jeopardy

Urinary Retention

Causes of Urinary Retention	Assessment Process	Management Practices	Catheter Complications	Random
10	10	10	10	10
20	20	20	20	20
30	30	30	30	30
40	40	40	40	40
50	50	50	50	50

Causes 10 points

Which of the following is NOT a major cause of urinary retention?

A. Trauma
B. Obstruction
C. Heart Attack
D. Pharmacological
E. Neurological

Causes 10 points

- Answer C: A heart attack is not a major cause of urinary retention.

Causes – 20 points

Surgery, particularly _____, can cause urinary retention.

Causes – 20 points

Procedures involving the rectum can cause urinary retention. Up to 70% of rectal surgery patients will experience urinary retention.

Causes– 30 points

The sympathetic nervous system is responsible for bladder voiding.

True or false?

Causes– 30 points

False

The parasympathetic nervous system controls bladder voiding.

Causes– 40 points

Name the three common drug classes that can cause urinary retention.

Causes– 40 points

1. Anticholinergics
2. Sympathomimetics
3. Nonsteroidal anti-inflammatory drugs (NSAIDs)

Causes– 50 points

Name the most common cause of obstructive urinary retention in men and describe how this condition causes urinary retention.

Causes– 50 points

- Benign prostatic hyperplasia is the most common cause of urinary retention in men
- BPH is a condition in which the prostate gland enlarges, pressing down on the urethra causing obstruction

Assessment– 10 points

What are the five steps to the assessment process?

Assessment– 10

1. Assessment
2. Diagnosis
3. Plan
4. Implementation
5. Evaluation

Assessment 5 20

Bladders scanners can be used to measure what?

Assessment– 20 points

- Post voidal residual (PVR) urine

Assessment– 30 points

Name the three commonly used nursing diagnosis for urinary retention in LTCFs.

Assessment– 30 points

1. Impaired urinary elimination
2. Readiness for enhanced urinary elimination
3. Urinary retention

Assessment– 40 points

List three key things that should be reevaluated during the evaluation step.

Assessment– 40 points

- Ability or ease of voiding
- Frequency of urination
- Presence of abnormal tenderness or swelling
- Measuring fluid intake and output
- Determine if fluid output is < 30 mL/hour

Assessment– 50 points

List three preventative measures for urinary retention.

Assessment– 50 points

- Instruct residents to urinate when they first feel the urge
- Promote relaxation during voiding attempts
- Perform actions that may trigger the urge to urinate
- Allow residents to void under normal circumstances, with privacy, when possible
- Give residents constructive tips to promote urination

Management 10 points

A bladder canner is an effective management tool for urinary retention.

True or False?

Management– 10 points

False

Bladder canners can be used as an assessment tool to determine if the resident has urinary retention.

Management& 20&points

List&all&possible&management&practices&for&urinary&retention.&

Risk&factors& 20&

1. Indwelling&catheters
2. Intermittent&atheters
3. External&atheters&
4. Scheduled&toileting
5. Bladder&training
6. Bladder&massages&

Management– 30&points

Indwelling&urinary&atheters&are&the&afest&method&for&treating&urinary&retention.

True&or&False?

Management– 30&points

False

Indwelling&urinary&atheters&hould&be&a&last&esort&for&the&management&of&urinary&retention&

Management– 40&points

What&s&a&cheduled&toileting&program?

Management– 40&points&

- Scheduled&oiding&s&a&ehavioral&technique&hat&alls&for&cheduled&oileting&at&egular&ntervals&
- It&s&a&pecific&approach&hat&s&rganized,&planned,&ocumented,&nonitored&nd&evaluated&nd&s&onsistent&with&he&nursing&omes&olicies&nd&rocedures&and&urrent&tandards&f&ractice

Management– 50 points

_____ is a behavior technique that requires a resident to resist or inhibit the urge to urinate until indicated by a timetable. What is this management practice and what are the goals set by this practice?

Management 50 points

- Bladder retraining
- Goals
  - Reduce frequency of voiding
  - Restore overall normal bladder function

Complications– 10 points

What is the most common adverse health event associated with urinary catheters?

Complications 10

- Catheter-associated urinary tract infections (CAUTIs)

Complications 20 points

Creation of a false passage is a common complications of what type of catheterization?

Complications– 20 points

- Intermittent catheters
- The insertion and removal of a catheter 4-6 times per day can lead to creation of a false passage

Complications– 30 points

List three common complications of indwelling urinary catheters.

Complications– 30 points

- Bacteriuria
- Catheter-associated urinary tract infections (CAUTIs)
- Urolithiasis
- Urethritis
- Epididymitis
- Urethral strictures
- Prostatitis

Complications– 40 points

Improper fitting of external catheters in men can lead to what adverse health affects? List three

Complications- 40 points

- Maceration
- Ulceration necrosis
- Gangrene of the penis
- Trauma to the urethral meatus

Complications- 50 points

Approximately 97% of catheterized residents acquire a new infectious organism each day.

After how many days does the prevalence of infection reach 100%?

Complications- 50 points

- 30 days
- Residents with indwelling urinary catheters are 10 times more likely to have bacteremia than residents without urinary catheters

Random – 10 points

What is the name of the of the bladder muscle responsible for voiding?

Random 10

- Detrusor muscle
- The detrusor muscle remains relaxed until it is time to void. During voiding, the detrusor contracts pushing urine out of the bladder via the urethra

Random – 20 points

What are the two types of urinary retention? Define both terms.

Random – 20 points

1. Acute urinary retention – the sudden inability to urinate
2. Chronic urinary retention – the constant inability to completely void the bladder

Random – 30 points

What are the two most common microorganisms that cause infectious urinary retention?

Nutrition 30 points

- *Escherichia coli*
- *Proteus* species

Random – 40 points

Name three factors that can decrease bladder muscle tone.

Random – 40 points

- Muscle wasting due to prolonged immobility
- Muscle damage due to vaginal childbirth
- Being overweight
- Muscle atrophy secondary to menopause
- Traumatic damage to pelvic muscles and nerves

Random – 50 points

Indwelling urinary catheters should be avoided if at all possible; however, sometimes they are necessary. What are the appropriate indications for indwelling catheters and long-term care facilities?

Random – 50 points

- Urinary retention that:
  - Causes persistent overflow incontinence, infections or renal dysfunction
  - Cannot be corrected surgically or medically
  - Cannot be practically managed with intermittent catheterization
- Short-term for skin wounds or pressure ulcers
- Provisions of palliative care or of care for severely impaired patients for whom bed and clothing changes are uncomfortable or disruptive